

## CLAIMS

We claim:

- 1 1. A method for reconstructing an integrated circuit package comprising:  
2 attaching a die to exposed wire bond pads of a lead frame so that the die is  
3 electrically connected to the lead frame; and  
4 encapsulating the die and the wire bond pads in an encapsulant; and  
5 reshaping an upper surface of the encapsulant where at least a portion of the  
6 encapsulant reshaping is performed by a lapping process.
- 1 2. A method according to claim 1, wherein lapping is performed by an  
2 abrasive or ablative lapping process.
- 1 3. A method according to claim 1, wherein lapping is performed by a  
2 mechanical, chemical, or electromagnetic lapping process.
- 1 4. A method according to claim 1, wherein encapsulating the die and the wire  
2 bond pads results in the encapsulant having a convex or concave an upper surface,  
3 and reshaping the encapsulant results in the encapsulant having a planar an upper  
4 surface.
- 1 5. A method according to claim 1, further comprising marking the reshaped  
2 upper surface of the encapsulant.
- 1 6. A method according to claim 1, wherein the reshaped upper surface of the  
2 encapsulant is sufficiently flat to permit labeling by printing, photolithographic or  
3 mechanical marking techniques to simulate a production transfer molded  
4 encapsulated IC package, the method further comprising marking the reshaped  
5 upper surface of the encapsulant.

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- 1 7. A method according to claim 1, wherein lapping is performed using a laser  
2 or another source of electromagnetic radiation.
- 1 8. A method according to claim 1, wherein lapping is performed using a  
2 planar abrasive surface.
- 1 9. A method according to claim 1, wherein lapping is performed using a  
2 planar abrasive surface attached to a wheel or belt.
- 1 10. A method according to claim 1, wherein lapping is performed using a  
2 planar abrasive surface sufficiently large to permit more than one package to be  
3 lapped at the same time.
- 1 11. A method according to claim 1, wherein lapping is performed by chemical  
2 etching.
- 1 12. A method according to claim 1, wherein lapping is performed using a gas-  
2 jet or liquid-jet containing a particulate material.
- 1 13. A method according to claim 1, wherein lapping is performed via a  
2 mechanical grind.
- 1 14. A method according to claim 1, wherein lapping is performed using a  
2 combination of mechanical and chemical ablation.
- 1 15. A method according to claim 1, wherein lapping is performed using a  
2 combination of mechanical and electromagnetic ablation.
- 1 16. A method according to claim 1, wherein lapping is performed using laser  
2 ablation.

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1 17. A method according to claim 1, wherein lapping is performed using a  
2 combination of electromagnetic and chemical ablation.

1 18. A method according to claim 1, wherein lapping is performed by impinging  
2 an ultra-fine particulate using a high pressure gas-jet against the material to be  
3 lapped.

1 19. A method according to claim 1, wherein lapping is performed by impinging  
2 an ultra-fine particulate under high pressure against the material to be lapped.

1 20. A method according to claim 1, wherein lapping is performed by delivering  
2 a pulsating liquid-jet under high pressure against the material to be lapped.

1 21. A method according to claim 1, wherein lapping is performed by plasma  
2 etching.

1 22. A method according to claim 1, wherein lapping is performed by a  
2 pressurized liquid against the material to be lapped.